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EXAMINER

ZALUKAEVA, TATYANA

ART UNIT	PAPER NUMBER
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1713

DATE MAILED: 05/24/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/942,278

Applicant(s)

CAREY ET AL.

Examiner

Tatyana Zalukaeva

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 March 2005.
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 24-37 is/are pending in the application.
4a) Of the above claim(s) 24-33 is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 34-37 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☒ Claim(s) 24-37 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____

DETAILED ACTION

1. Claims 1-23 have been cancelled. New claims 24-37 are introduced. Claims 24-32 are directed to a method of preparing a paint; claim 33 is drawn to a method of providing a substrate; claim 34 is directed to a polymeric aqueous dispersion; claims 35-37 are directed to a coating composition.

Initially presented and now cancelled claims 1-23 were directed to an aqueous coating composition.

2. Newly submitted claims 24-32 and 33 are directed to an invention that is independent or distinct from the invention originally claimed for the following reasons: if initially presented they would have been restricted on the basis of a product and process of using;

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claim 24-33 are withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 34-37 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which

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was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The claims contain the formula, wherein both "c" weight percent of acrylic acid and "d" weight percent of methacrylic acid are positively recited values that contribute to the formula, which Applicants consider the essence of their invention. However, the body of the claims provides the acrylic acid, and methacrylic acid in the alternative by Markush recitation, thus having either "c" or "d" in the formula, and as such, the either the relationship described by the formula cannot be fulfilled, and thus persons skilled in the art would not be able to make and use the claimed invention.

Double Patenting

5. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

6. Claim 34 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 12 of U.S. Patent No. 6,420,474. Although the conflicting claims are not identical, they are not patentably distinct from each other because the both disclosed anionically stabilized addition polymerized

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polymeric aqueous dispersion having the identical components in identical amounts with identical characteristics.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.

4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

10. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

11. Claims 34-37 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over EP'0 466409 discloses a polymer blend useful as a binder in an aqueous coating composition which is a blend of a **hard emulsion polymer** having a glass transition temperature greater than room temperature preferably from **25 to 65°C**, and soft emulsion polymer having a glass transition temperature less than about **20°C**, preferably from 10 to -5°C . (See abstract and page 3, lines 1-5). EP' 409 discloses the specific routes and recipes for making **hard and soft** polymeric dispersions. Thus Table 1 provides for standard emulsion polymerization process for preparation of soft and hard polymers in the presence of conventional anionic stabilizers in different ratios in the presence of an anionic surfactant. If the following amounts of reactants, for example, are selected (Table 1 pages 5 and 6) 1190 parts of methyl methacrylate (line 1 of page 6), and 42.5 parts of

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methacrylic acid (line 6 of page 6) (according to claim 1 either acrylic or methacrylic acid is used) the formula of claim 1 would be as follows:

$$\underline{X = 5 + 1190 / (0 + 34 / 2.4)^2}$$

If calculated **X=5.93**, which is clearly within the scope of the instant claims and clearly overlaps with the formula of the instant claim 1.

With regard to the properties that are not disclosed in EP'409, the rejection is made in the sense of **In re Fitzgerald** (205 USPQ 594). (CAFC)

6. Claim 34 is rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over EP 0562 730 A1 or AU 1664276, each one individually.

A1 EP '730 discloses a high gloss sealer coatings comprising a latex polymer which in its turn comprising (a) less than about 20% of (meth)acrylate monomers (b) less than about 35 % of styrene, (c) greater than about 35% of methyl methacrylate and (d) from about 1 to 15% by weight of ethylenically unsaturated carboxylic acid (page 3, lines 7-12). The list of (met) acrylate monomers, as well as ethylenically unsaturated carboxylic acids presented on page 3, lines 18-30 clearly overlaps in scope and chemical identity with the monomers of claims 1-22. The polymerization was carried out in a water dispersions with the use of anionic stabilizers, as shown in example 1, page 6, and in Table on page 7.

When calculated from the preferred and nonpreferred embodiments of EP'730 monomers ratios, the relative amounts of monomers used, clearly overlap in scope with

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the ratios as presented by formulas of instant claims. There is no teaching on a glass transition temperature of the polymeric dispersion in EP' 730. However, there is a teaching on the glass transition temperature of each component of the dispersion mixture, as if it were a homopolymer's glass transition temperature. It is believed that the glass transition temperature of EP'730 dispersion mixture if not taught may be very well met by the Patentees' T_g , since the polymeric dispersions of EP'730 are the same as and are made in essentially manner as the instant polymeric dispersions, consult *In re Fitzgerald* (205 USPQ 594). (CAFC). Criticality for such clearly commensurate in scope with the instant claims not having been demonstrated on this record.

AU '642 discloses aqueous plastic dispersions for paints produced by polymerization in aqueous media the following monomers:

- a) from 20-79.4% by weight methyl methacrylate, styrene and vinyl toluene or a mixture thereof;
- b) from 20-79.4% by weight of monomers selected from acrylic acid esters carrying an alcohol radical with 2-8 carbon atom;
- c) from 1-5% by weight of acrylic, methacrylic acid, acrylamide, methacrylamide, etc;
- d) from 0.5 to 10% by weight of an acetoacetic acid ester; (Page 4, lines 2-22)

If any one of the ranges taught by AU'642, such as for example, 70 parts of an ester of acrylic or methacrylic acid and 5 parts of acrylic acid and 0 parts of methacrylic acid are exemplified for calculations, the ratio of the formula in the instant claim is 3, which clearly within the claimed (2-13) range.

Emulsions of AU'642 are stabilized with anionic stabilizers, such as sodium and ammonium salts.

In regard to the glass transition temperature of the polymeric dispersion AU'642 does not specify the T_g of a dispersion. However it is a base presumption that the properties, governing the aqueous coatings and a dispersion mixture of AU'642, namely glass transition temperature, would be the same as the T_g of the Patentees' because those dispersions and aqueous coatings are essentially the same as, and are made in essentially the same process as the instantly claimed aqueous coatings and dispersion mixture. The onus to show that this, in fact, is not the case is shifted to applicants as per *In re Fitzgerald* (205 USPQ 594). (CAFC).

12. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tatyana Zalukaeva whose telephone number is (571) 272-1115. The examiner can normally be reached on 9:00 - 5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu can be reached on (571) 272-1305. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Tatyana Zalukaeva
Primary Examiner
Art Unit 1713



May 19, 2005